

Product datasheet for AP13250PU-N

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OriGene Technologies, Inc.

p27 KIP 1 (CDKN1B) (C-term) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, WB

Recommended Dilution: ELISA: 1/1,000.

Western blotting: 1/50-1/100. Immunofluorescence: 1/10-1/50.

Reactivity: Human
Host: Rabbit
Isotype: Ig

Clonality: Polyclonal

Immunogen: KLH conjugated synthetic peptide selected from the C-terminal region of Human 27Kip1.

Specificity: This antibody recognizes Human 27Kip1.

Other species not tested.

Formulation: PBS with 0.09% (W/V) Sodium Azide as preservative

State: Aff - Purified

State: Liquid purified Ig fraction

Concentration: lot specific

Purification: Protein A column, followed by peptide affinity purification

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 22073 kDa

Gene Name: cyclin-dependent kinase inhibitor 1B

Database Link: Entrez Gene 1027 Human

P46527



Background:

p27Kip1 is a cyclin-dependent kinase inhibitor, which shares a limited similarity with CDK inhibitor CDKN1A/p21. The encoded protein binds to and prevents the activation of cyclin E-CDK2 or cyclin D-CDK4 complexes, and thus controls the cell cycle progression at G1. The degradation of this protein, which is triggered by its CDK dependent phosphorylation and subsequent ubiquitination by SCF complexes, is required for the cellular transition from quiescence to the proliferative state.

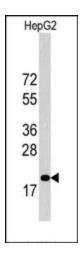
Function: Important regulator of cell cycle progression. Involved in G1 arrest. Potent inhibitor of cyclin E- and cyclin A-CDK2 complexes. Forms a complex with cyclin type D-CDK4 complexes and is involved in the assembly, stability, and modulation of CCND1- CDK4 complex activation. Acts either as an inhibitor or an activator of cyclin type D-CDK4 complexes depending on its phosphorylation state and/or stoichometry.

Cellular Location: Nucleus. Cytoplasm. Endosome (By similarity). Note=Nuclear and cytoplasmic in quiescent cells. AKT- or RSK-mediated phosphorylation on Thr-198, binds 14-3-3, translocates to the cytoplasm and promotes cell cycle progression Mitogen-activated UHMK1 phosphorylation on Ser-10 also results in translocation to the cytoplasm and cell cycle progression Phosphorylation on Ser-10 facilitates nuclear export

Tissue Location: Expressed in all tissues tested. Highest levels in skeletal muscle, lowest in liver and kidney.

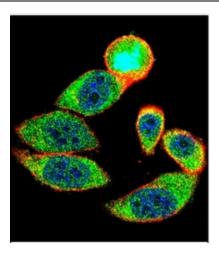
Synonyms: p27Kip1

Product images:



Western blot analysis of p27Kip1 Antibody (Cterm) in HepG2 cell line lysates (35ug/lane). 27Kip1 (arrow) was detected using the purified Pab (1/60 dilution).





Confocal immunofluorescent analysis of 27Kip1 Antibody (C-term) with Hela cell followed by Alexa Fluor 488-conjugated Goat anti-Rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).